

Fig. 1(A)

| Library (human) | LTRPC2 | NUDT9 |
|---------------------|--------|-------|
| 1. Bone marrow | + | + |
| 2. Spleen | + | + |
| 3. Brain | + | + |
| 4. Heart | + | + |
| 5. Kidney | - | + |
| 6. Testis | - | + |
| 7. Prostate | - | + |
| 8. Leukocyte | + | + |
| 9. Liver | + | + |
| 10. Lung | + | + |
| 11. Skeletal muscle | - | + |
| 12. Fetal brain | + | + |
| 13. Fetal heart | + | + |
| 14. Fetal kidney | + | + |

Fig. 1(B)

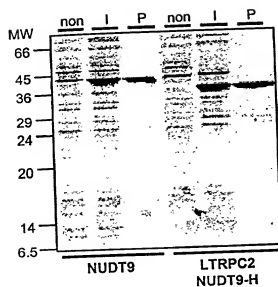


Fig. 2(A)

| | NUDT9 | NUDT9-H |
|-----------------------|--|---|
| pH optimum | 7.5-9.0 | 8.5-9.5 |
| metal optimum | 16 mM Mg ²⁺ | 16 mM Mg ²⁺ |
| metal specificity | Mn ²⁺ will substitute for 50% activity at 5 mM, 0% at 20 mM. Zn ²⁺ , Co ²⁺ , Cu ²⁺ had no significant effect | Mn ²⁺ , Zn ²⁺ , Co ²⁺ , Cu ²⁺ had no significant effect |
| substrate specificity | ADP-ribose | ADP-ribose |
| products | AMP + ribose-5-phosphate | AMP + ribose-5-phosphate |
| K _m | 0.100 ± 0.014 mM | 0.100 ± 0.014 mM |
| V _{max} | 11.824 ± 0.302 μMol/min/mg | 0.106 ± 0.006 μMol/min/mg |

Fig. 2(B)

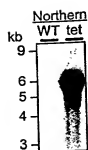


Fig. 3(A)

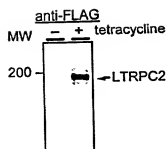


Fig. 3(B)

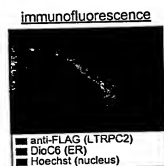


Fig. 3(C)

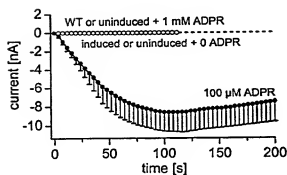


Fig. 3(D)

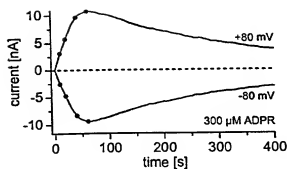


Fig. 3(E)

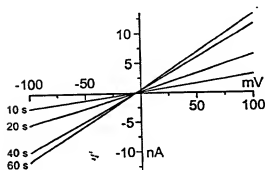


Fig. 3(F)

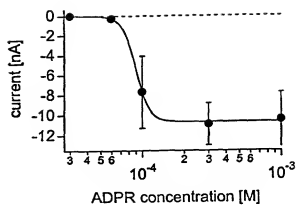


Fig. 4(A)

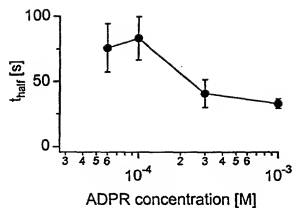


Fig. 4(B)

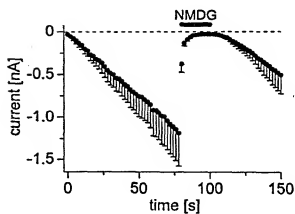


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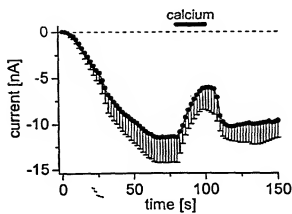


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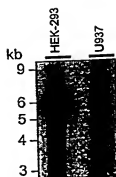


Fig. 5(A)

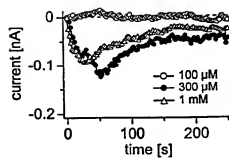


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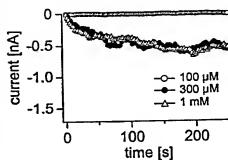


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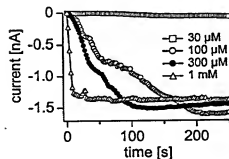


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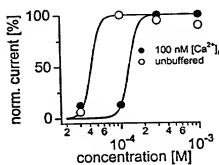


Fig. 5(E)

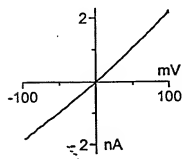


Fig. 5(F)


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Fig. 6

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Fig. 7

(sheet 1 of 2)

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Fig. 7

(sheet 2 of 2)


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Fig. 8

(sheet 1 of 2)


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Fig. 8
(sheet 2 of 2)